

REMARKS

Reconsideration of the subject patent application is respectfully requested.

In the first (non-final) Office Action, the Examiner correctly notes that claims 1-27 were elected and that claim 28 is withdrawn from consideration. This action by the Examiner is consistent with the election made by the undersigned attorney of record on February 24, 2005.

Otherwise, claims 1, 8, 10-12, 22 and 27 stand rejected under 35 U.S.C. §102(b) as being anticipated by Bradshaw et al. Claim 11 is further rejected under 35 U.S.C. §102(b) as being anticipated by Johanson. Claims 2-4, 18-20, and 23-26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bradshaw et al. Claims 5-6, 9, and 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bradshaw et al. in view of Hammer. Claims 13-16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bradshaw et al. in view of Johanson. Claim 17 is rejected under 35 U.S.C. §103(a) as being unpatentable over Bradshaw in view of Johanson and further in view of Hammer.

Although none of claims 1-27 have been indicated as allowable, Applicant believes that there are very clear structural differences between the claimed invention and the devices disclosed in Bradshaw et al., Johanson, and Hammer. The various amending changes that have been made to the claims are an effort on behalf of the Applicant to focus on some of these structural differences. Further, and importantly, there are improvements and benefits derived from the structural differences employed as part of

the claimed invention that are not existent in any of the references cited by the Examiner and are not anticipated nor suggested by any of the cited references.

With regard to the rejection of independent claim 1, the Examiner relies entirely on the Bradshaw et al. patent. Although the concaved scallops 8/8a are considered by the Examiner to correspond to the recited axially-protruding projections, the clear fact is that not only do these scallops not contact the surface of the drum end, they are not designed to do so and there is no teaching or suggestion anywhere in the Bradshaw et al. patent that this type of result or outcome would be appropriate. With regard to any possible reliance on Johanson that the Examiner may wish to make in view of the deficiencies of Bradshaw et al., it should be noted that any sort of axially-protruding projection, such as structure 34 in Johanson, is a continuous annular form and does not constitute any type of "spaced-apart" structure, as recited in claim 1. Additionally, since structure 34 is intended to provide an additional seal, segmenting that annular form into a plurality of spaced-apart projections would be completely at odds and inconsistent with the intended function and purpose of that structure.

If the Examiner considers combining Hammer with Bradshaw and/or Johanson, it is noted that the lugs 9 of Hammer have a lower edge that is ramped or inclined and those portions do not extend from an outer portion of a radial flange. Although Hammer was cited principally in connection with claims 5, 6, 9, and 21, it will be seen that, for example, claim 5 has been amended to recite that the closing plug has a longitudinal axis and that the substantially flat lower surface of each protruding projection is substantially perpendicular to that longitudinal axis. Not only is this particular structure something of

Amendment Response
Serial No. 10/602,905 Group Art Unit 3727
Atty. Docket No. 1104-750/RKE-075
Page 7 of 12

importance to the claimed invention, it is completely different from what is disclosed in the Hammer patent.

With continued reference to the rejection of claim 1 and the Bradshaw et al. patent, the Examiner is asked to consider the description within Bradshaw et al. regarding the intended use of scallops 8/8a. These are designed for manual tightening and as one would envision, with the hand of the user fitting down over that outer surface and fitting into the individual concave surfaces of the scallops, the tips of the fingers are going to extend beneath that lower edge. That is the only way to get adequate gripping in terms of the ergonomics of the hand and the differences in terms of the strength or grip of the hand between just using fingertips and using the entire hand with the fingertips extended beneath and curled around the surfaces being gripped. Unless there is adequate clearance space between the lower edge of the scallops and the upper surface of the drum end, there is no clearance available for the tips of the fingers. In order to realize any benefit from the intended function of those scallops, clearance space needs to be left below the lower edge.

With regard to the rejection of independent claim 11, this claim has been amended so as to include the basic closing plug structure recited in claim 1 in addition to the threaded flange and the sealing gasket. As noted, the sealing gasket, while positioned around the threaded body, is arranged for sealing between the radial flange and the drum end. In considering the Bradshaw et al. structure, it is seen that the sealing gasket 9 is positioned between the radial flange and the threaded flange and does not seal against the drum end. While one may elect to discount this particular structural difference in terms of an oversimplification, suggesting that a sealing gasket is a sealing gasket and, as long

Amendment Response
Serial No. 10/602,905 Group Art Unit 3727
Atty. Docket No. 1104-750/RKE-075
Page 8 of 12

as it seals, it is equivalent. However, as can be clearly seen in the FIG. 4 arrangement of Bradshaw et al., placing the gasket in that location such that it seals against the plug and the threaded flange, there is no way for one to visually inspect the overall combination and ensure that the gasket is installed. By Applicant's arrangement of placing the gasket such that it seals against the drum end and looking at the spaced-apart arrangement of the axially-protruding projections, visual inspection is possible such that one can verify that the gasket is properly positioned prior to tightening of the plug into the threaded flange.

Over the years the Court of Customs and Patent Appeals (CCPA) and more recently the Court of Appeals for the Federal Circuit (CAFC) have addressed the issue of what criteria is to be applied when combining two or more references under 35 U.S.C. §103. While the facts may differ from case to case and while the CAFC panel may change, the legal precedent established by the Board of Patent Appeals and Interferences and the CCPA has been followed and strengthened by the later cases of the CAFC. Clearly and succinctly stated, before obviousness may be established, the examiner must show that there is either a suggestion in the art to produce the claimed invention or a compelling motivation based on sound scientific principles. Ex parte Kranz, 19 USPQ2d 1216, 1218 (Bd. Pat. App. & Inter., 1990). The case law makes it clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is vigorous application of the requirement for a showing of the teaching or motivation to combine prior art references. C.R. Bard, Inc. v. M3 Sys., Inc., 157 F.3d 1340 (Fed. Cir. 1998). Obviousness cannot be established by combining the teachings of prior art in order to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. In re Geiger, 2 USPQ2d 1276 (Fed. Cir. 1987). It

Amendment Response
Serial No. 10/602,905 Group Art Unit 3727
Atty. Docket No. 1104-750/RKE-075
Page 9 of 12

is improper to reject the claimed invention for obviousness when nothing in the cited references, either alone or in combination, suggests or teaches the claimed invention. Evidence of teaching or suggestion is "essential" to avoid hindsight. In re Fine, 5 USPQ2d 1596 (Fed. Cir. 1988). Stated slightly differently, the mere fact that the prior art may be modified to reflect features of the claimed invention does not make modification, and hence the claimed invention, obvious unless the desirability of such modification is suggested by the prior art. In re Fritch, 23 USPQ2d 1780 (Fed. Cir. 1992).

It is generally accepted, however, that it is improper to change the basic principle under which the primary reference was intended to operate. In re Ratti, 123 USPQ 349 (CCPA 1959). It is not enough to pick out isolated features in earlier prior art patents, combine them in one particular way with the application of hindsight acquired only from the applicant's own disclosure, and then say that it would have been obvious to select those particular features and to combine them in the particular way in which the applicant has. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. There must be some teaching or suggestion in the references to support their use in the particular claimed invention. Smithkline Diagnostics, Inc. v. Helena Laboratories Corp., 8 USPQ2d 1468 (Fed. Cir. 1988).

There must be some logical reason apparent from positive concrete evidence in the record that justifies a combination of primary and secondary references. In re Regel, Buchel and Plempel, 188 USPQ 136 (CCPA 1975). It is insufficient to show merely that each separate element of a claimed combination can be found in one or various prior art references. The mere fact that it is possible to find two isolated disclosures which might

Amendment Response
Serial No. 10/602,905 Group Art Unit 3727
Atty. Docket No. 1104-750/RKE-075
Page 10 of 12

be combined in such a way to produce a new invention does not necessarily render such new invention obvious unless the prior art also contains something to suggest the desirability of the combination. In re Gergen, 11 USPQ2d 1652, (Fed. Cir. 1989).

It is impermissible within the framework of Section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. In re Wessslau, 147 USPQ 391, (CCPA, 1965), Bausch & Lomb v. Barnes-Hind/Hydrocurve, 230 USPQ 416 (CAFC, 1986). Without the benefit of applicant's disclosure, a person of ordinary skill in the art would not know what portions of the reference to consider and what portions to disregard as irrelevant, or misleading. In re Mercier, 185 USPQ 774 (CCPA, 1975). Combining prior art references without evidence of such a suggestion, teaching or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability – the essence of hindsight. Interconnect Planning Corp. v. Feil, 774 F2d 1132 (Fed. Cir. 1985).

In view of the amending changes that have been made and after giving due consideration to the remarks and applicable case law, the Examiner is respectfully requested to place this application in condition for allowance. No additional filing fee is required and there are no other issues or informalities to be addressed based upon the Office Action.

Amendment Response
Serial No. 10/602,905 Group Art Unit 3727
Atty. Docket No. 1104-750/RKE-075
Page 11 of 12

Respectfully submitted,

By James M. Durlacher
James M. Durlacher, Reg. No. 28,840
Woodard, Emhardt, Moriarty,
McNett & Henry LLP
Bank One Center/Tower
111 Monument Circle, Suite 3700
Indianapolis, Indiana 46204-5137
(317) 634-3456

Amendment Response
Serial No. 10/602.905 Group Art Unit 3727
Atty. Docket No. 1104-750/RKE-075
Page 12 of 12